

REMARKS

This responds to the Office Action mailed on February 3, 2005.

Claims 1, 12, 22, 31, 52, 58, and 59 are amended, no claims are canceled, and no claims are added; as a result, claims 1-59 are now pending in this application. The amendments to the claims are fully supported by the specification as originally filed. No new matter is introduced. Applicant respectfully requests reconsideration of the above-identified application in view of the amendments above and the remarks that follow.

Information Disclosure Statement

Applicant submitted a Supplemental Information Disclosure Statement and a 1449 Form on January 18, 2005. Applicant respectfully requests that an initialed copy of the 1449 Form be returned to Applicant's Representatives to indicate that the cited references have been considered by the Examiner.

§102 Rejection of the Claims

Claims 1, 3-5, 11, 12, 14-16, 18, 19, 21, 22, 24, 25, 28, 30, 31, 33, 34, 36, 52, and 54-56 were rejected under 35 U.S.C. § 102(b) for anticipation by Aoyama et al. (U.S. 4,507,673). Applicant traverses these grounds for rejection of these claims.

Applicant cannot find in Aoyama et al. (hereafter Aoyama) a disclosure, a teaching, or a suggestion of a method including “storing data by changing charge on a storage electrode configured such that an energy barrier at an interface between the storage electrode and an adjacent insulator has a barrier energy of less than approximately 3.3 eV, the storage electrode having an electron affinity less than 3.7 eV,” as recited in amended claim 1. Thus, Applicant submits that Aoyama does not anticipate claim 1 and that claim 1 is patentable over Aoyama for at least the reasons stated above.

For at least reasons similar to those stated above with respect to claim 1, Applicant submits that Aoyama does not anticipate independent claims 12, 22, 31, and 52 and that claims 12, 22, 31, and 52 are patentable over Aoyama. Claims 3-5, and 11, claims 14-16, 18, 19, and 21, claims 24, 25, 28, and 30, claims 33, 34, and 36, and claims 54-56 depend on claims 1, 12,

22, 31, and 52, respectively, and are patentable over Aoyama for at least the reasons stated above.

Applicant respectfully requests withdrawal of these rejections of claims 1, 3-5, 11, 12, 14-16, 18, 19, 21, 22, 24, 25, 28, 30, 31, 33, 34, 36, 52, and 54-56, and reconsideration and allowance of these claims.

First §103 Rejection of the Claims

Claims 6-10, 17, 20, 26, 27, 29, and 35 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Aoyama et al. Applicant traverses these grounds for rejection of these claims.

For at least the reasons stated above, claims 1, 12, 22, and 31 are patentable over Aoyama. Claims 6-10, claims 17 and 20, claims 26, 27, and 29, claims 35 depend on claims 1, 12, 22, and 31, respectively, and are patentable over Aoyama for at least the reasons stated above.

Applicant respectfully requests withdrawal of these rejections of claims 6-10, 17, 20, 26, 27, 29, and 35, and reconsideration and allowance of these claims.

Second §103 Rejection of the Claims

Claims 2, 13, 23, 32, and 53 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Aoyama et al. in view of Wakai et al. (U.S. 5,032,883). Applicant traverses these grounds for rejection of these claims.

Applicant cannot find in Aoyama in view of Wakai et al. (hereafter Wakai) a teaching or a suggestion of a method including “storing data by changing charge on a storage electrode configured such that an energy barrier at an interface between the storage electrode and an adjacent insulator has a barrier energy of less than approximately 3.3 eV, the storage electrode having an electron affinity less than 3.7 eV,” as recited in amended claim 1. Thus, Applicant submits that Aoyama in view of Wakai does not establish a *prima facie* case of obviousness with respect to claim 1 and that claim 1 is patentable over Aoyama in view of Wakai for at least the reasons stated above.

For at least reasons similar to those stated above with respect to claim 1, Applicant submits that Aoyama in view of Wakai does not establish a *prima facie* case of obviousness with

respect to independent claims 12, 22, 31, and 52 and that claims 12, 22, 31, and 52 are patentable over Aoyama in view of Wakai.

Claim 2, claim 13, claim 23, claim 32, and claim 53 depend on claims 1, 12, 22, 31, and 52, respectively, and are patentable over Aoyama in view of Wakai for at least the reasons stated above.

Applicant respectfully requests withdrawal of these rejections of claims 2, 13, 23, 32, and 53, and reconsideration and allowance of these claims.

Allowable Subject Matter

Claims 57-59 were objected to as being dependent upon a rejected base claim, but were indicated to be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 57 is dependent on patentable claim 52 and, therefore, is patentable. Claims 58 and 59 are rewritten in independent form including all of the limitations of the base claim and any intervening claims and, therefore, are patentable. Applicant respectfully requests withdrawal of these objections of claims 57-59, and allowance of these claims.

Applicant acknowledges allowance of claims 37-51.

Assertion of Pertinence

Applicant has not responded to the assertion of pertinence stated for the patents cited, but not relied upon, by the Office Action since these patents are not relied upon as part of the rejections in this Office Action. Applicant is expressly not conceding they have any pertinence and reserves the right to respond more fully should any of them form a part of some future rejection.

CONCLUSION

Applicant respectfully submits that the claims are in condition for allowance, and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney at (612) 371-2157 to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

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By their Representatives,

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Date

27 April 2005

By

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CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Mail Stop Amendment, Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on this 27 day of April, 2005.

Name

Tina Kehut

Signature

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